

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015459**Date Inspected:** 06-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 1W/2W Weld ID: D1 & D2, Face B
- 2). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face B
- 3). OBG Field Splice 3W/4W Weld ID: C1 & C2, Face B
- 4). OBG Field Splice 3W/4W Weld ID: E1 & E2, Face B
- 5). OBG Field Splice 5W/6W Weld ID: D1 & D2, Face B
- 6). OBG Field Splice 4W/5W Weld ID: E1 & E2, Face B

- 1). OBG Field Splice 1W/2W Welds D1 & D2, Face B

The QAI periodically observed approved welder Rory Hogan (#3186) grinding in the existing groove to excavate (5) five indications previously identified by Magnetic Particle Testing (MT). The QAI observed SE QC Inspector Tony Sherwood perform MT of the excavated areas and no rejectable indications were noted. The performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. Repair welding was performed by Mr. Hogan utilizing the Shielded Metal Arc Welding (SMAW) process and 3.2mm electrode per the Welding Procedure Specification (WPS) identified as ABF-WPS-D15-1000 Repair Rev. 2. The repair work at this location was completed during this shift. The QAI observed that the welding parameters and the final weld repairs appeared to be in general compliance with the contract documents. The QAI periodically observed AB/F personnel setting up for FCAW-G at this location for the remainder of this shift.

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2). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face B

The QAI periodically observed AB/F personnel performing plasma cutting to remove the backing bar and prepare the outside groove for back welding. The work at this location was not completed during this shift.

3). OBG Field Splice 3W/4W Weld ID: C1 & C2, Face B

The QAI periodically observed AB/F personnel performing flush grinding of the completed OBG Field Splice welds C1 & C2. The work at this location was not completed during this shift.

4). OBG Field Splice 3W/4W Weld ID: E1 & E2, Face B

The QAI periodically observed SE QC Inspector Steve McConnell performing Ultrasonic Testing (UT) from the B Face of OBG Field Splice 3W/4W Weld ID: E1 & E2. Mr. McConnell utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the CJP weld. The QC technician performed scanning of (2) two repair areas only utilizing a .63 x .75 rectangular transducer to perform the shearwave testing. The UT examination was completed during this shift. At the conclusion of the QC testing the QAI inquired as to the results of the testing. Mr. McConnell stated to the QAI that the results were acceptable however he also stated that another SE QC inspector was performing UT of the same areas from the inside.

5). OBG Field Splice 5W/6W Weld ID: D1 & D2, Face B

The QAI periodically observed AB/F personnel installing fit-up gear on the OBG Field Splice 5W/6W Weld ID: D1 & D2, Face B. The fit-up at this location was originally performed on Friday 7-2-10. QC Inspector Bonafacio Daquinag stated to the QAI that the backing bar had shifted and was no longer centered on the joint. On this date the fit-up gear was loosened and the fit-up was re-done by approved welder Rick Clayborn (2773). After the fit-up was completed on this date, the QC and AB/F welding personnel performed measurements from the inside of the joint and found the fit-up to be satisfactory. U-bars were welded to Face B per the SMAW process in the 4F position by approved welder Rick Clayborn. QC Inspector Bonafacio Daquinag was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1200-A. See photo below of an installed U-bar with bull pin.

6). OBG Field Splice 4W/5W Weld ID: E1 & E2, Face B

The QAI periodically observed AB/F personnel installing fit-up gear on the OBG Field Splice 4W/5W Weld ID: E1 & E2, Face B. Fit-up gear was initially installed on 7-1-10 and on this date approved welder Rick Clayborn (2773) installed U-bars to complete the fit-up. U-bars were welded to Face B per the SMAW process by approved welder Rick Clayborn. QC Inspector Bonafacio Daquinag was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1200-A.

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Summary of Conversations:

None of relevance.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By: Madison,Bert

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer